## (12) UK Patent Application (19) GB (11) 2 280 650 (13) A

(43) Date of A Publication 08.02.1995

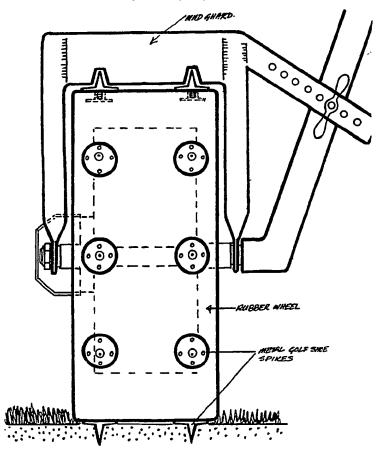
- (21) Application No 9316347.5
- (22) Date of Filing 06.08.1993
- (71) Applicant(s)
  Gordon George Coleman
  Fantails, 53 Shirley Church Road, CROYDON, Surrey,
  CR0 5EF, United Kingdom
- (72) Inventor(s)

  Gordon George Coleman
- (74) Agent and/or Address for Service
  Gordon George Coleman
  Fantails, 53 Shirley Church Road, CROYDON, Surrey,
  CR0 5EF, United Kingdom

- (51) INT CL<sup>6</sup>
  B60C 27/04 , A01B 45/02 , B60S 1/68
- (52) UK CL (Edition N )
  B7C CPF
  A1E EBX
  B7J J114
  U1S S1156 S1827
- (56) Documents Cited GB 2251226 A GB 0786297 A US 4605239 A US 3926239 A

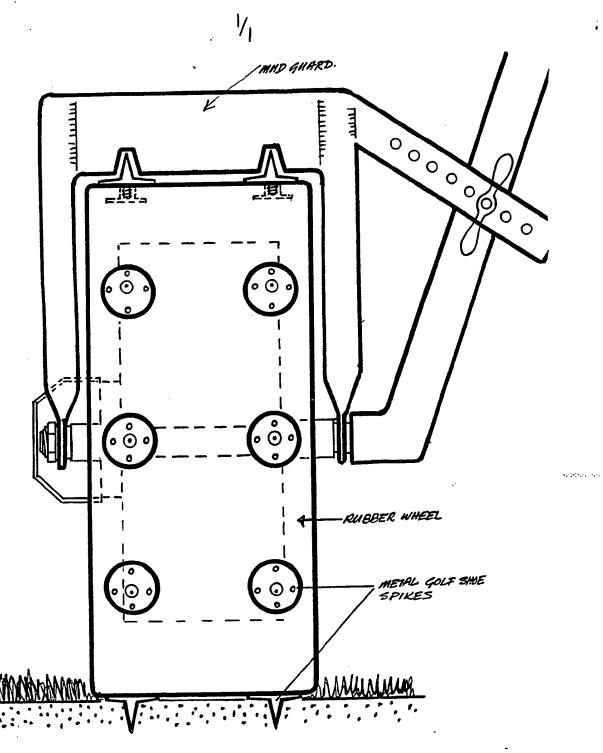
#### (54) Metal spiked golf trolley wheels

(57) A golf trolley wheel has approximately 16 replaceable metal studs or spikes each being screw threaded into a mount embedded in the wheel. These spikes will aerate the turf soil, as opposed to todays wheels which cause compaction. A metal or brush type mudguard may be provided to eradicate loose material.



The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

At least one of these pages has been prepared from an original which was unsuitable for direct photoreproduction.



# ALL WEATHER METAL SPIKED GOLF TROLLEY BLAGEY, WHEELS

A golf trolleys function is designed to obviously carry a golf bag, containing clubs and many other accessories, to avoid the strain of carrying a load by the player.

For several months of the year, usually between April through to September, the trolleys cause little or no damage to the golf courses. However, in the British climate, like many other countries, rain causes the ground conditions to soon change. The golf courses become soft underfoot, therefore problematic for the use of todays trolleys, mainly resulting in compaction to the turf. Therefore the majority of golf clubs throughout, ban the use of trolleys. My club, as many others, continued the ban from October 1992 through to April 1993. This obviously caused distress to many players having to carry them, some older or incapacitated members not being able to play at all during this period.

The spiked wheel which I have designed, which is very similar to the sole of todays golf shoe, should cause the minimum of damage and would create a gentle airation to the turf, which should be welcomed by all green staff in all weather conditions.

This design would have a rubber wheel as most are at present, with replaceable spiked metal studs, exactly the same method as todays golf shoes.

Each wheel would require a kind of mudguard to prevent the build-up of waste matter. I intend to seek the advice of a trolley manufacturer when my initial application is acknowledged, as there are many different designs to which this could be adapted.

The above design could not only be used on hand pulled trolleys, but also for use on battery powered and electric buggies.

### CLAIMS

Golf trolley wheels comprising of normal rubber or synethic material tyre, with approximately 16 metal female threaded pieces moulded within, to which 16 metal male golf stud types used in present day golf shoes screwed in place.

To the best of my knowledge all golf trolley wheels are of a flat nature, or some of the mechanical types with a tyread similar to automobile wheels. All of these cause compaction to the turf soil in inclement conditions. Therefore trolleys of this type are banned by Golf Clubs whilst these conditions prevail.

The spiked wheels as claimed will airate the turf soil allowing air to circulate to the roots. These spikes would also help to keep the actual wheels from coming into contact with the surface, thus causing less compaction.

The above wheels would be fitted with either a metal or brush type mudguard to eradicate loose material being picked up by the wheels.

Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search report)  -3-	Application number GB 9316347.5  Search Examiner C J DUFF	
(i) UK Cl (Ed.M) B7C (CPF); B7J		
(ii) Int Cl (Ed.5) B60C 11/00, 11/14, 11/16	Date of completion of Search 29 SEPTEMBER 1994	
Databases (see below)  (i) UK Patent Office collections of GB, EP, WO and US patent specifications.  (ii)	Documents considered relevant following a search in respect of Claims:-	

### Categories of documents

- X: Document indicating lack of novelty or of inventive step. P: Document published on or after the declared priority date
- Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

  but before the filing date of the present application.

  E: Patent document published on or after, but with priority date
- A: Document indicating technological background and/or state of the art.

  earlier than, the filing date of the present application.

  Member of the same patent family: corresponding date.
  - &: Member of the same patent family; corresponding document.

Category	I	Relevant to claim(s)	
X	GB 2251226 A	(ELLIOT) whole document	Ail ·
X	GB 786297	(PECHÉ) whole document	All
X	US 4605239	(WARFEL) see Figures 1 and 2	Ali
X	US 3926239	(PETERSONS) see column 2 lines 45-52; column 4 lines 37-42	All
			-
		,	
		·	
		·	
		,	

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).

THIS PAGE BLANK (USPTO)